

Precision Agriculture Loan Act

Fact Sheet

Precision agriculture can increase productivity, optimize water usage, decrease inputs, and lower greenhouse gas emissions all while providing an economic return for farmers. The Precision Agriculture Loan act would create a loan program at USDA for precision agriculture that would allow more producers to invest in these technologies and help them adopt more climate-friendly practices.

Issue

The value of precision agriculture isn't just at the farm level. The aggregate benefits of precision agriculture technologies have a huge environmental benefit. For example, the adoption of auto steer has decreased fuel use by estimated 100 million gallons. Other precision agriculture technologies, like variable rate and sensor driven pivots have prevented the application of 30 million pounds of herbicide and 500,000 million gallons of water. The World Economic Forum estimates that if just a quarter of the world's farms adopted precision agricultural practices, farm yields globally could increase by 15%. Greenhouse gas emissions and water use could decrease by at 10% and 20%, respectfully.

But like all technology, precision agriculture technology is constantly changing and expensive to adopt. For many small to midsize farmers, the benefits they could receive from precision agriculture technology are outweighed by the initial cost. A USDA Economic Research Service (ERS) study showed that larger farms, over 2,900 acres, had double the adoption rates of precision agriculture. There is a risk associated with adopting technology and producers can be hesitant or unable to make these investments make sense for their operations through traditional financing options.

Solution

The Precision Agriculture Loan program will provide dedicated financing through USDA Farm Service Agency to help producers purchase precision agriculture equipment.

- To obtain a loan, a producer would select from a list of eligible equipment or technology approved by FSA. The legislation provides a list of eligible precision ag equipment categories.
 - Producers would be eligible for multiple loans up to an aggregate limit of \$500,000 and term lengths of 3-12 years at lower interest rates than traditional financing to de-risk the investment in these technologies.
 - Farmers could purchase new equipment or retrofit existing equipment with new technologies as well as seek microloans offered with lower down payment and interest requirements.
- Emissions measuring feedbunks that allow dairy and beef producers to measure methane and change their feed to **reduce emissions**
 - Precision Irrigation pivots, using weather and soil data to apply water only when it is needed, **reducing water usage**
 - Weedseeker sprayer sensors, enabling sprayers to only apply herbicide or fertilizer where it is needed, **reducing chemical use and drift**



Examples of Precision Ag

